ALTICA OR HALTICA?

By WILLIAM COLCORD Woods, Wesleyan University.

When we examine the 1758 (10th) edition of Linnaeus's Systema Naturae, we find most of the leaf beetles included in the single genus Chrysomela, which corresponds quite closely to what we recognize to-day as the family Chrysomelidae. The first step toward splitting up this complex was made a few years later, in 1762, when Geoffroy, a French entomologist, erected a new genus for those species of Chrysomela in which the hind thighs are thickened for leaping—that is, for the flea-beetles, designating them as Altica (Hist. nat. des insectes . . . t. 1:244). This generic name, based on the Greek adjective ἄλτικος, skilled in leaping, was emended to Haltica by Illiger, because of its Greek derivation, in 1802 (Mag. f. Insektenk. Bd. 1: 138). In 1917 the writer advanced the opinion that Geoffroy's spelling should stand despite his omission of the aspirate (Me. Agr. Exp. Sta. Bul. 265, p. 274, ct seq.), but since Haltica is retained as the preferred spelling in Leng's recent list of the Coleoptera, it seems advisable to review the evidence.

Article 19 of the International Code: "The original orthography of a name is to be preserved, unless an error of transcription, a lapsus calami, or a typographical error is evident" seems to be the only rule bearing directly on the question of emendations. Altica Geoffroy is not a lapsus calami, since Geoffroy customarily omitted the "h" in transliterating from Greek, nor is it a typographical error. Is it an error of transcription in the sense of the Code?

Before any specific case is settled there should be some consideration of the general principles involved, for if the emendation to Altica be admitted, consistency demands that the missing aspirate be supplied in all similar cases. In the Coleoptera alone, no less than 85 generic names in addition to Altica must be similarly changed if we are to insist rigidly on an exact transliteration from the original Greek, for most French scientists and apparently some of the earlier English zoölogists deliberately disregarded the breathing in forming words from Greek roots. How, therefore, can we expect a stable nomenclature except by recognizing priority and accepting each name in the form in which it was first proposed? That our present American usage is chaotic rather than scientific—still confining our attention to the Coleoptera—any one fairly familiar with Greek can discover for himself by running

through the index of genera in Leng's recent list of the Coleoptera, a most careful and painstaking work deservedly recognized as the standard catalogue of North American beetles. Below, though by no means complete, is a list of generic names occurring in this work, all of which are derived from Greek words beginning with a rough breathing, and were originally proposed without the aspirate. In the first column is given the original orthography, in the second the correct transliteration according to present American ideas, and in the third the form in which the name appears in the Leng catalogue.

Original orthography.

Correct translitera- Form in Leng's Catalogue.

Abraeus	Habraeus	Abraeus
Altica	Haltica	Haltica
Aploderus	Unaladamia	(Altica) Aploderus
Apioderus	Haploderus	(Haploderus)
Elodes	Helodes	Helodes
		(Elodes)
Elosoma	Helosoma	Elosoma
Omala	Homala	Omala
Omalisus	Homalisus	Omalisus
Omalium	Homalium	Omalium
		(Homalium)
Omalodes	Homalodes	Omalodes
Omophron	Homophron	Omophron
Ormiscus	Hormiscus	Ormiscus
		(Hormiscus)

Of these eleven generic names proposed originally without the "h," in two, Haltica and Helodes, the emendment is admitted; in three, Aploderus, Omalium, and Ormiscus, it is rejected; and the remaining six are left in their original form. From the standpoint of the Altica-Haltica controversy, it is interesting to note that Homalisus does not appear at all in the List, because Geoffroy proposed Omalisus as well as Altica, and Illiger emended the former to Homalisus just as he did the latter to Haltica, so that the status of the two names is exactly the same. It seems evident that we should accept consistently the original orthography in all cases, or else employ all these names only in an emended form; the first alternative alone commends itself to the writer's judgment.

Passing now to the specific case of Altica vs. Haltica, the argu-

ments in favor of the older name may be summarized as follows: (1) Article 19, strictly interpreted, does not deal with transliteration; (2) Altica is a transliteration found in classical Latin; (3) Geoffroy in this transliteration merely followed contemporary French usage; and (4) the Latin language, the language of scientific nomenclature, has never been strict in the use of the aspirate. Except for (2) these arguments are equally valid for cases similar to that of Altica.

(1) Altica as a Latinized form of the Greek $a \lambda \tau u \kappa o s$ is at worst an error, not of transcription, but of transliteration. Article 19 of the Code makes no statement about transliteration, but as it seems evident from the context that "transcription" is used in the sense of "transliteration," the writer does not wish to rest on this technicality, believing that wisely or unwisely in intent if not in wording the Code admits the possibility of emendations.

(2) Although there is no definite statement in the *Histoire*, the writer does not doubt that Geoffroy Latinized *Altica* directly, without regard to classical usage, yet it is relevant to point out precedents for such a transliteration. Alticus, a Roman cognomen well known from inscriptions, is doubtless derived from the Greek ἄλτικος (White and Riddle, Latin Dictionary), while in Homeric Greek the second agrist of the related verb ἄλλομαι occurs regularly with the smooth breathing instead of the rough. The writer does not believe that either of these cases influenced Geoffroy, but they do show that emendation is unnecessary in this particular case.

(3) But the crux of the situation lies in the fact that Geoffroy simply followed the best French usage in omitting the aspirate when transliterating from Greek. Under these circumstances no fair charge of "error of transcription" can be alleged, for the Code obviously refers, not to a widespread linguistic custom, but only to individual errors.

To avoid unnecessary detail, only the work of Commerson, Geoffroy's exact contemporary, is cited. Commerson, at the request of Linnaeus, wrote a treatise on the fishes of the Mediterranean, in which the "blennie sauteur" is described as *Alticus*, with the common name "altique." This paper, though never published, was completed about 1755; it has, of course, no zoölogical status, and *Alticus* was never subsequently proposed as a generic name.*

^{*}Halticus, however, was proposed by Hahn in 1831 and is a valid genus of hemipterous insects of the family Miridae.

but it does show the prevailing usage. As has been stated, Geoffroy proposed Altica in 1762, vulgarizing the name as "altise." Both "altique" and "altise" appear in the Grand Dictionnaire of Pierre Larousse, the standard French dictionary. Under both words the derivation is given as "du gr. altikos, sauteur," the aspirate being omitted, and the word written in Latin, not Greek, characters. The volume containing the "a's" was published in 1866; the second supplementary volume, published without imprint about 1800, refers back to this volume for the derivation of "altise." Since, judging from French and Italian dictionaries, a disregard of the aspirate in transliterating from Greek is the recognized usage of those languages, there can be no reasonable doubt that the "h" was deliberately omitted by many of the earlier zoologists in forming generic names based on Greek roots, and that Geoffroy in forming Altica and Omalisus intentionally left out the "h." It would seem perfectly clear that Altica Geoffroy, by no means an "evident error of transcription" in the sense of the International Code, should be retained, Haltica Illiger being listed as a synonym.

Certainly *Haltica* should at all events be referred to Illiger, 1802, and not Geoffroy, 1762, as is commonly done. Article 21 of the Code states that the citation of the author's name is to denote responsibility and to aid in bibliographic research, not to "give credit." It does not make any easier what is at best a tangle to refer to Geoffroy a name which did not appear in his Histoire and which was not proposed until fifty years later. In discussing a somewhat similar case, Article 3 says: "In following this plan we are not attempting to rob Redon of any supposed credit which belongs to him, but we do not hold him responsible for names

introduced by later authors."

If *Altica* be retained, of course the tribe Halticini will become Alticini, and the subfamily Halticidae, Alticidae.

(4) Two illustrations out of many possible ones will suffice to show the deviations of Latin usage as regard the "h." The best Latin, as well as the Sanskrit derivation, demands that "harena," a sandy place, be spelled with an "h," but the incorrect spelling, "arena," came into commoner use and has persisted. On the other hand, while the Latin word for shoulder, being related to the Greek \$\tilde{\rho}\mu\rho_s\$, should be written "umerus" and not "humerus," the incorrect spelling, "humerus," has passed into scientific use. Until we are prepared to change "arenarius" wherever it occurs as a

specific name to "harenarius," and to treat of the "umerus" instead of the "humerus" in our textbooks of anatomy, we can not, with any consistency, admit Illiger's emendation of *Altica*.

The writer is one of those entomologists who does hope that ultimately we may recover a stable nomenclature, and for that reason he still finds himself in cordial agreement with the opinion which Allard expressed so many years ago. "It seems to me," he wrote in discussing the *Altica-Haltica* problem, "that the orthography of the word should be determined by priority, and since Geoffroy in 1762 and Fourcroy in 1785 wrote it with an 'a,' with Latreille we must respect their right of invention and omit the 'h'" (Ann. Soc. Ent. Fr., 1860, ser. 3, t. 8: 41).

OBSERVATIONS ON THE OCHTERIDAE.

By Prof. R. Takahashi.

[English Résumé by the author of the original Japanese in Trans. Nat. Hist. Soc. Formosa, Vol. XI, No. 55, pp. 119-125 (1921).]

Very little has been published relative to the habits of the family Ochteridae and the writer made these observations on *Ochterus formosanus* Mats., which is not uncommon in Formosa:

- (1) The adults live upon the sandy shores of ponds or streams, where the color of the backs merges into their surroundings, rendering them difficult to discern. They are not able to submerge, and do not run out upon the water, where they are sometimes found by accident, but the nymphs are amphibious, being often seen submerged.
- (2) The adults are very active, although the nymphs are rather inactive. The death-feigning habit has never been observed.
- (3) The species is not gregarious, but two or three nymphs are sometimes found in groups.
- (4) The nymphs sometimes vibrate their abdomens vertically a little for a few seconds when resting on the shores.
- (5) The nymphs cover their backs completely with sandy granules. All the instars have this habit. Their heads are provided, on the front, with 12–14 short, stout processes, projecting forward and arranged in a transverse row, with which they scoop the sand upon their heads and push it backward with the front legs.